

Service
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Service Manual

For repair information of the cassette mechanism
see Service Manual of Recorders tape deck RDN-2

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(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

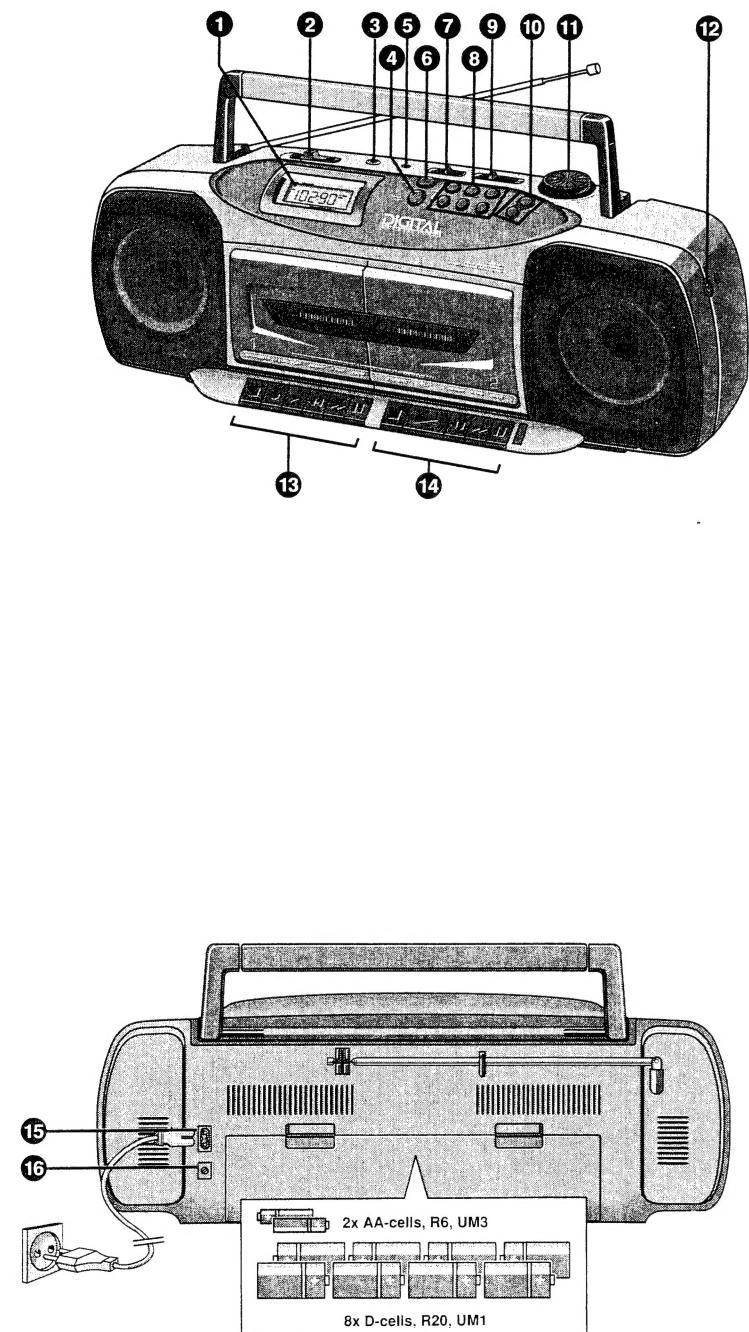
(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambiago identici a quelli specificati.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.





1	Display	A140	9	DBB selector	3512
2	FM/AM	A101	10	Tuning up	A160
3	Mic		11	Tuning down	A161
4	Mono/Stereo	A164	12	Volume control	3542
5	Power indicator	6346	13	Headphone	1251
6	Program memo	A165	14	Tape control A	
7	Mode switch	1551	15	Tape control B	
8	Preset selector	A162,A163	16	AC mains socket	1253
		A166,A167		Not applicable	
		A168,A169			

ADJUSTMENT	CASSETTE	SK...	Recorder position DECK I	DECK II	MEASURE ON	READ ON	ADJUST WITH	ADJUST TO
Azimuth	10KHz SBC 420*	Cass.	Play	-	1251	mV-meter	Left hand Screw Play head	Max. L = R
		Cass.	-	Play	1251	mV-meter	Left hand Screw R/P Head	
Motor speed (Normal)	3150Hz SBC 420*	Cass.	Play	-	1251	Wow and Flutter meter	preset in motor	** a
		Cass.	-	Play	1251	Wow and Flutter meter	-	
Motor speed (high)	3150Hz SBC 420*	Cass. HSD	Record	Play	1251	Frequency counter	-	6.0KHz ± 0.3KHz

* SBC 420 : 4822 397 30071

** a The maximum permissible speed deviation is 2%.
Moreover, the wow and flutter value can be read.
This value should not exceed 0.35%.

SPECIFICATIONS

GENERAL

Mains voltage : 120V - 220V - 240V
 Mains setting/selection : Serviceable
 set at 220V for -00
 set at 240V for -05
 Mains frequency : 50Hz - 60Hz
 Battery : 12V (R20 x 8)
 Backup battery : 3V (R6 x 2)
 Power consumption : 16W max.
 Dimension (W x D x H) : 520 x 175 x 147 mm
 Weight : 3.13kg

TUNER : FM SECTION

Tuning range : 87.5MHz - 108MHz
 Intermediate Frequency : 10.7MHz
 Sensitivity : <6µV 26dB S/N
 Selectivity at 600kHz bandwidth : >20dB
 IF rejection : >50dB
 Image rejection : >20dB

TUNER : AM SECTION

Tuning range SW : 5.82MHz - 18.2MHz
 MW : 522kHz - 1611kHz
 LW : 148kHz - 284kHz
 Intermediate Frequency : 450kHz
 Sensitivity SW : <400µV 26dB S/N
 MW : <3.0mV/M 26dB S/N
 LW : <4.5mV/M 26dB S/N
 Selectivity at 18kHz bandwidth SW : >16dB
 MW : >16dB
 LW : >20dB
 IF rejection : >30dB
 Image rejection SW : >6dB
 MW : >28dB
 LW : >30dB

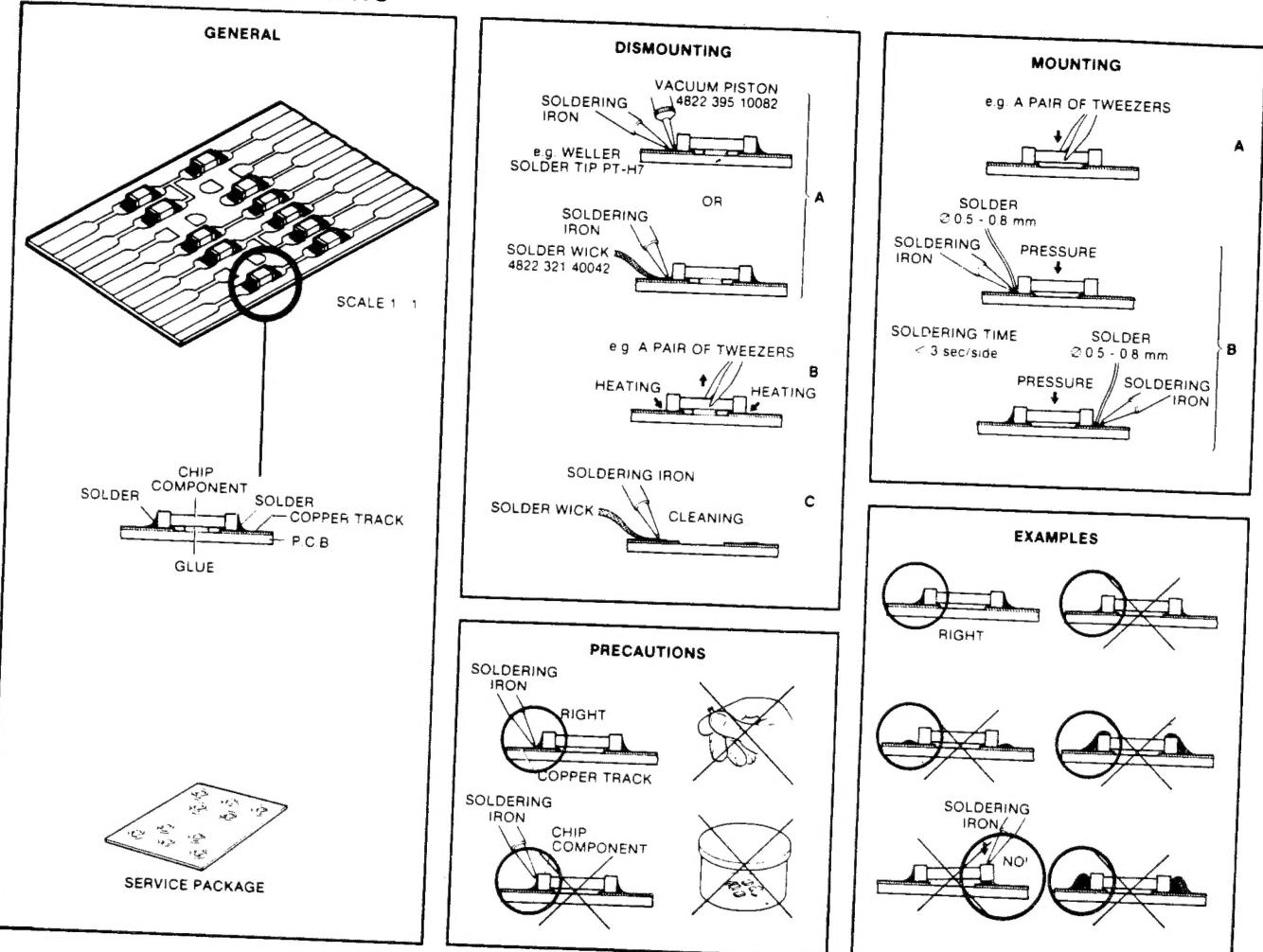
AMPLIFIER

Output power (D = 10%) : 2 x 1.5W -1dB (Mains)
 2 x 2W -1dB (Battery)
 Speaker impedance : 2 x 8Ω
 Frequency response (within 3dB) : 250Hz - 8kHz
 DBB slider : +6dB at 200Hz
 Headphone output : 15mW at 32Ω

CASSETTE RECORDER

Number of tracks : 2 x 2 stereo
 Tape speed : 4.76 cm/sec ± 2%
 2 x 4.76 cm/sec
 Wow and flutter : <0.35%
 Fast-wind time C60 : 130 sec
 Bias system : 70kHz ± 15kHz (FM)
 DC bias (AM)
 Rec playback frequency response (within 8dB) : 250Hz - 4kHz (AM)
 250Hz - 6.3kHz (others)
 250Hz - 5kHz (HS dubbing)
 Signal to Noise ratio : >40dB (FM)
 >22dB (AM)
 >37dB (Dubbing)

HANDLING CHIP COMPONENTS



27 012C12

	Carbon film 0.2 W CR16	70°C	5%		Plate ceramic Tuning < 120 pF Others	2% -20/+80%	* a = 2.5 V b = 4 V c = 6.3 V d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Carbon film 0.33 W CR25	70°C	5%		Tubular ceramic		b = 4 V c = 6.3 V d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Carbon film 0.5 W CR37	70°C	5%		Polystyrene film / foil	1%	c = 6.3 V d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Standard film 0.5 W SFR16T	70°C	5%		Polyester Film / foil	10%	d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Standard film 0.4 W SFR25	70°C	5%		Mylar	10%	e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Metal film 0.6 W MRS25	70°C	5%				f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
	Safety resistor				Electrolytic		g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V q = 200 V r = 250 V s = 300 V t = 350 V u = 400 V v = 500 V w = 630 V x = 1000 V
				(C) Chip component			A = 1.6 V B = 6 V C = 12 V D = 15 V E = 20 V F = 35 V G = 50 V H = 75 V I = 80 V

26338

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

ESD**F** ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cautela alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

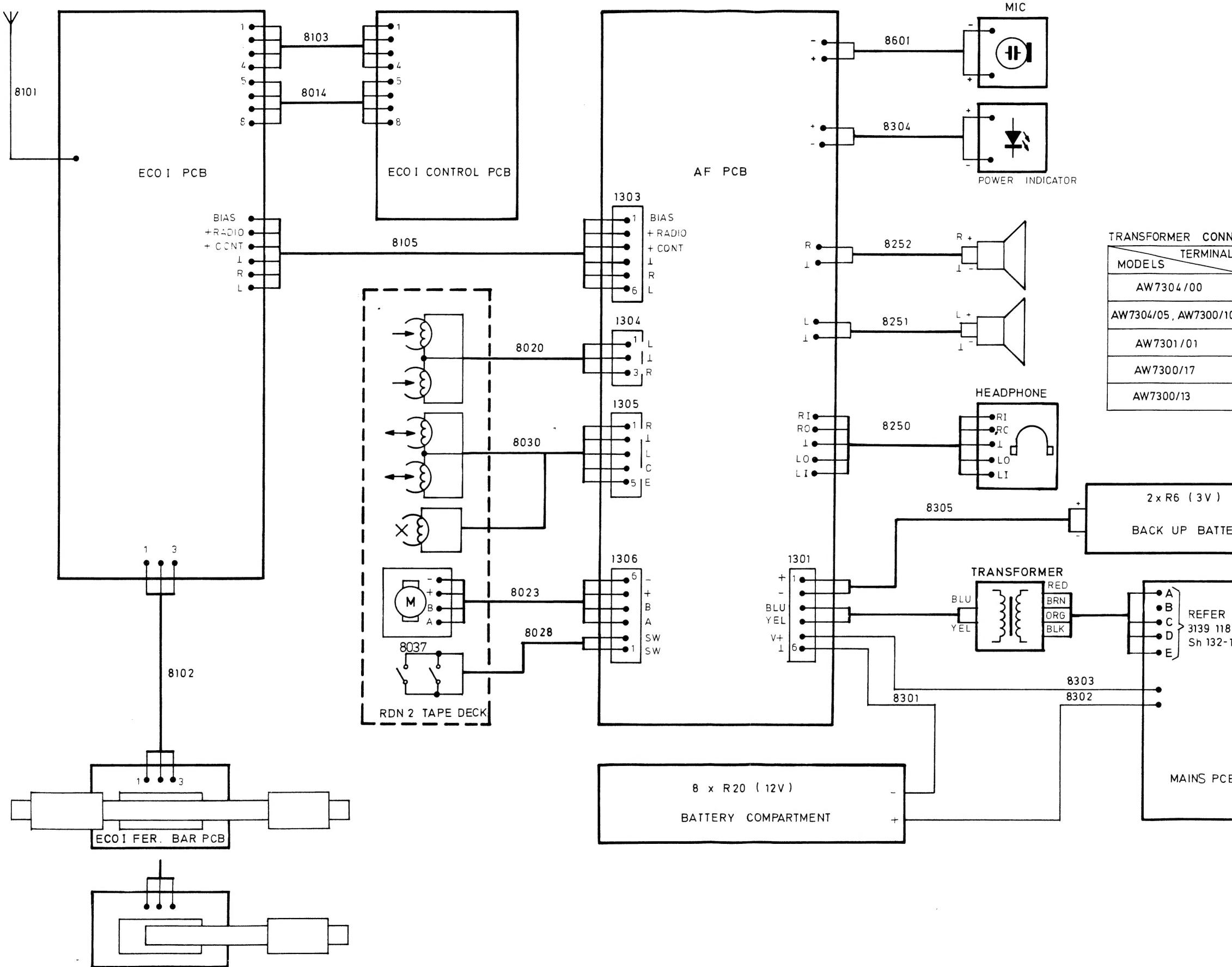
GB Because, generally speaking, MOS IC's are very sensitive to overload and too high voltages, measurements should be carried out with greatest possible care. For further instructions, see the directions enclosed in the separate IC-packages.

NL Omdat MOS IC's in het algemeen zeer gevoelig zijn voor overbelasting en te hoge spanning dient bij het meten de grootst mogelijke zorgvuldigheid in acht genomen te worden. Zie voor verdere instructies de bijsluiter in de verpakking van de IC's.

F Parce qu'en général, les IC MOS sont très sensibles à la surcharge et à des tensions trop élevées, il faudra procéder aux mesures avec le plus grand soin. Pour plus de détails, voir les instructions accompagnant l'emballage des IC.

D Da MOS IC's im allgemeinen sehr empfindlich gegen Überbelastung und zu hohe Spannung sind, muss man beim Messen äusserst vorsichtig vorgehen. Für weitere Weisungen siehe den beigefügten Zettel in der Verpackung der IC's.

I Dato che gli IC MOS sono molto sensibili alla sovraccarica e alle tensioni troppo alte, occorrerà procedere alle misure con particolare cautela. Per alti particolari riferirsi alla istruzioni comprese nell'imballaggio di ogni IC.



SK...	FREQUENCY	I/P	DISPLAY	ADJUST	O/P	SCOPE/METER
Varicap alignment						
FM 87.5-108MHz			108MHz 87.5MHz	5106 check	1	8.5V 2.05V ± 0.15V
SW 5.82-18.2MHz			18.2MHz 5.82MHz	5107 check		9.0V 2.10V ± 0.15V
LW 148-284kHz			284kHz 148kHz	5108 check		9.0V 2.00V ± 0.15V
MW 522-1611kHz			1611kHz 522kHz	2117 check		9.0V 2.05V ± 0.15V
AM-IF						
	450kHz * via 100nF	A		5111 5112 5114	2	max.
RF alignment						
FM	108MHz # 87.5MHz #	B	108MHz 87.5MHz	2108 5105	2	max.
SW	6.2MHz *		6.2MHz	5102		
MW	558kHz * 1494kHz *	C	558kHz 1494kHz	5103 2118		
LW	200kHz *		200kHz	5104		
Stereo decoder						
FM	98MHz carrier 1mV	B	98MHz	3147	3	76 ± 0.2kHz

* Mod 1kHz 30% AM

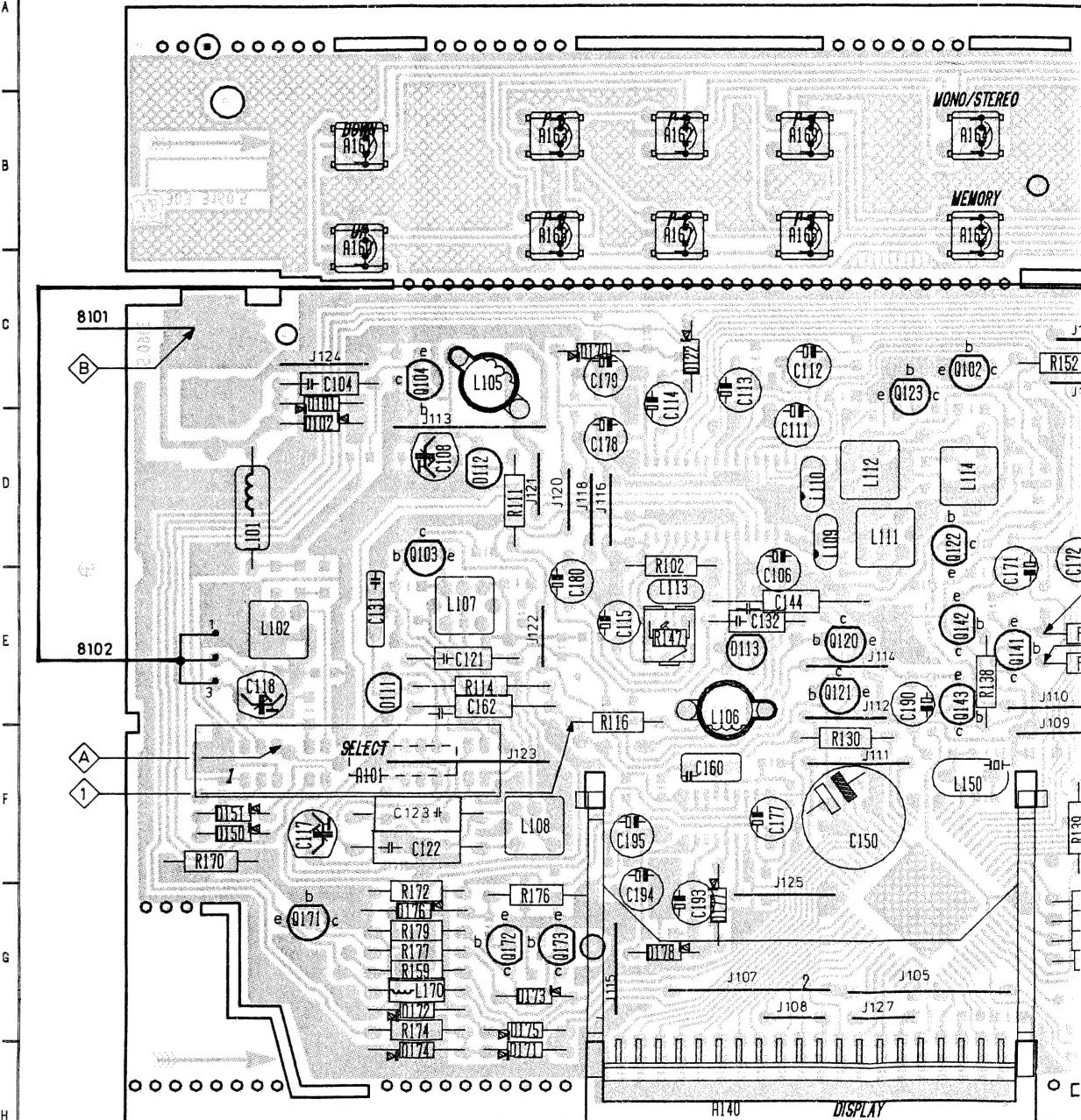
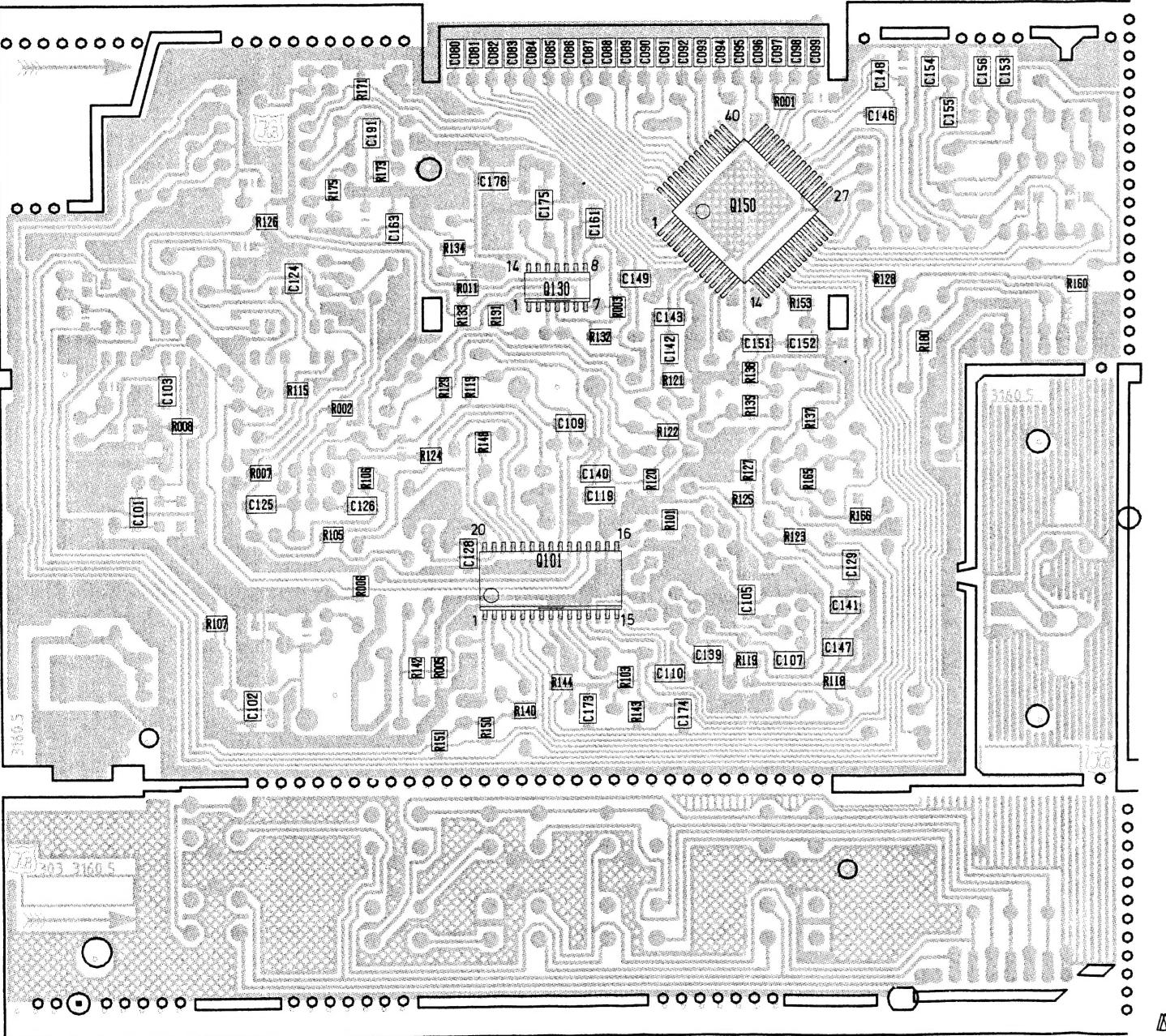
Mod 1kHz $\Delta f = 22.5\text{kHz}$

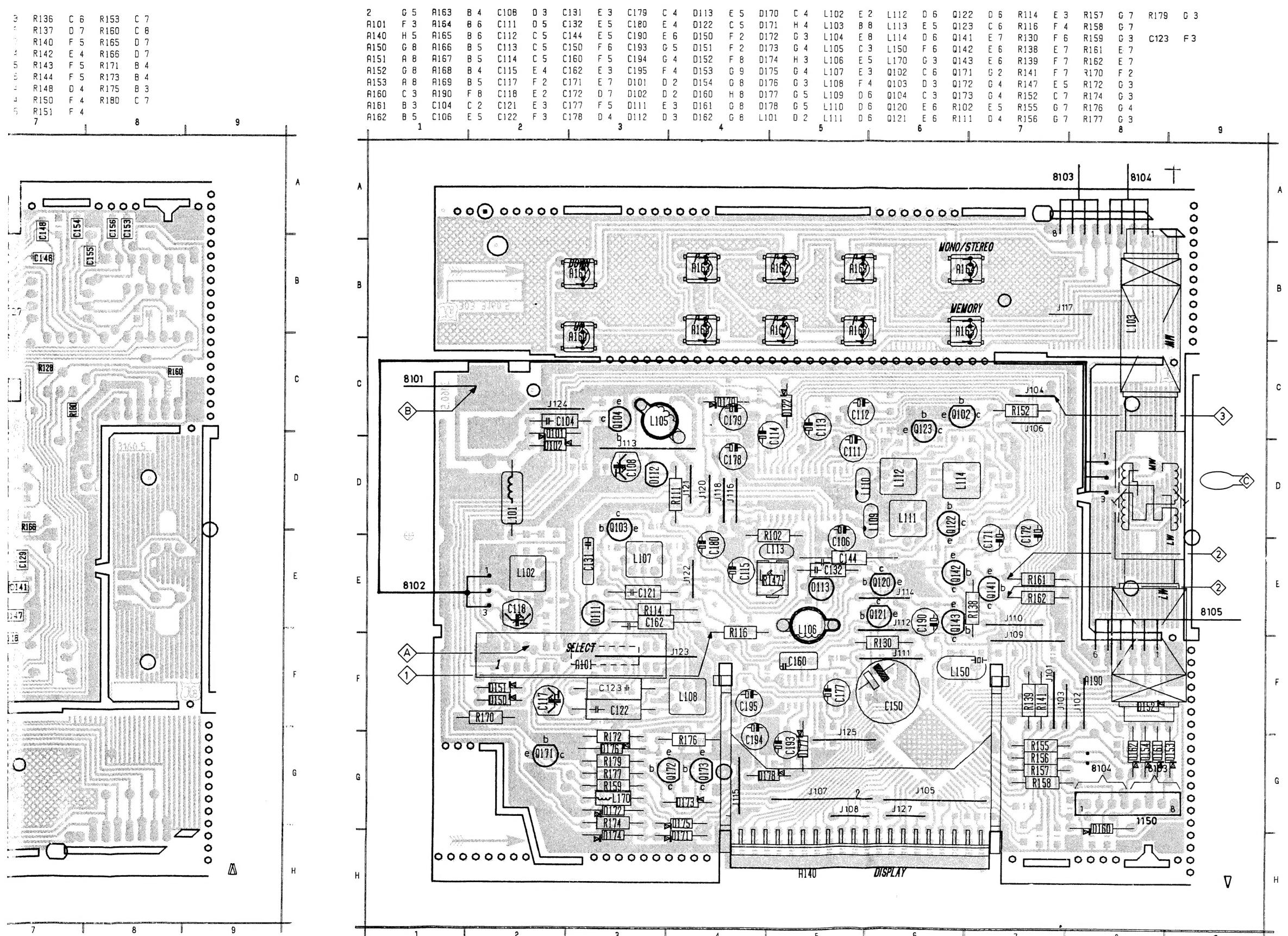
Repeat

C080	A 4	C089	A 5	C098	A 7	C119	D 5	C142	C 6	C154	A 7	C191	B 4	R007	D 3	R115	D 3	R126	B 3	R136	C 6	R153	C 7
C081	A 4	C090	A 6	C099	A 7	C124	C 3	C143	C 6	C155	B 8	Q101	E 5	R008	D 2	R118	F 7	R127	D 6	R137	D 7	R160	C 8
C082	A 4	C091	A 6	C101	D 2	C125	D 3	C146	B 7	C156	A 8	Q130	C 5	R011	C 4	R119	E 6	R128	C 7	R140	F 5	R165	D 7
C083	A 5	C092	A 6	C102	F 3	C126	D 4	C147	E 7	C161	B 5	Q150	B 6	R01	D 6	R120	D 6	R129	D 4	R142	F 4	R166	D 7
C084	A 5	C093	A 6	C103	D 2	C128	E 4	C148	A 7	C163	B 4	R001	B 6	R003	F 5	R121	D 6	R131	C 5	R143	F 5	R171	B 4
C085	A 5	C094	A 6	C105	E 6	C129	E 7	C149	C 5	C173	F 5	R002	D 3	R105	E 3	R122	D 6	R132	C 5	R144	F 5	R173	B 4
C086	A 5	C095	A 6	C107	E 6	C139	E 6	C151	C 6	C174	F 6	R003	C 5	R106	D 4	R123	E 7	R133	C 4	R148	D 4	R175	B 3
C087	A 5	C096	A 6	C109	D 5	C140	D 5	C152	C 7	C175	B 5	R005	E 4	R107	E 3	R124	D 4	R134	C 4	R150	F 4	R180	C 7
C088	A 5	C097	A 6	C110	F 6	C141	E 7	C153	A 8	C176	B 5	R006	E 4	R113	D 4	R125	D 6	R135	F 4	R151	F 4		

1 2 3 4 5 6 7 8 9

2	G 5	R163	B 4	C108	D 3	C131	E 3	C179	C 4	D113	E 5	D170	C 4	L102	E 2	L112	D 6	Q122	D 6	R11
R101	F 3	R164	B 6	C111	D 5	C132	E 5	C180	E 4	D122	C 5	D171	H 4	L103	B 8	L113	E 5	Q123	C 6	R11
R140	H 5	R165	B 6	C112	C 5	C144	E 5	C190	E 6	D150	F 2	D172	G 3	L104	E 8	L114	D 6	Q141	E 7	R13
R150	G 8	R166	B 5	C113	C 5	C150	F 6	C193	G 5	D151	F 2	D173	G 4	L105	C 3	L150	F 6	Q142	E 6	R13
R151	A 8	R167	B 5	C114	C 5	C160	F 5	C194	G 4	D152	F 8	D174	H 3	L106	E 5	L170	C 3	Q143	E 6	R13
R152	G 8	R168	B 4	C115	E 4	C162	E 3	C195	F 4	D153	G 9	D175	G 4	L107	E 3	Q102	C 6	Q171	G 2	R14
R153	A 8	R169	B 5	C117	F 2	C171	E 7	D101	D 2	D154	G 8	D176	G 3	L108	F 4	Q103	D 3	Q172	G 4	R14
R160	C 3	R190	F 8	C118	E 2	C172	D 7	D102	D 2	D160	H 8	D177	G 5	L109	D 6	Q104	C 3	Q173	G 4	R15
R161	B 3	C104	C 2	C121	E 3	C177	F 5	D111	E 3	D161	G 8	D178	G 5	L110	D 6	Q120	E 5	R102	E 5	R15
R162	B 5	C106	E 5	C122	F 3	C178	D 4	D112	D 3	D162	G 8	L101	D 2	L111	D 6	Q121	E 6	R111	D 4	R15





ITEM NUMBERING CONVERSION :-

REPLACE Axxx BY 1xxx
 Cxxx BY 2xxx
 Dxxx BY 6xxx
 Lxxx BY 5xxx
 Qxxx BY 7xxx
 Rxxx BY 3xxx
 Jxxx BY 9xxx

J101 F7
 J102 F8
 J103 F8
 J104 C7
 J105 G6
 J106 C7
 J107 G5
 J108 G5
 J109 F7
 J110 E7
 J111 F6
 J112 F6
 J113 D3
 J114 E6
 J115 G4
 J116 D4
 J118 D4
 J120 D4
 J121 D4
 J122 E4
 J123 F3
 J124 C2
 J125 G5
 J127 G6
 J117 B7

+Cont : 5.7V
+Radio : 12V

7116

	FM	AM
1	: 1.0V	1.0V
2	: 1.3V	1.3V
3	: 1.0V	1.0V
4	: 3.6V	3.6V
5	: 0.9V	1.0V
6	: 0.9V	1.0V
7	: 5.2V	5.2V
8	: 3.5V	3.5V
9	: 1.4V	1.2V
10	: 1.1V	1.3V
11	: 0V	0V
12	: 0V	0V
13	: 1.3V	0V
14	: 0V	0V
15	: 1.3V	0V
16	: 0.8V	0.2V
17	: 0V	0V
18	: 0.3V	0V
19	: 1.2V	1.2V
20	: 1.2V	1.2V
21	: 1.2V	1.2V
22	: 1.2V	1.2V
23	: 1.2V	1.2V
24	: 0V	1.2V
25	: 0.7V	0V
26	: 3.0V	3.5V
27	: 1.4V	1.4V
28	: 1.6V	1.6V
29	: 1.0V	1.0V
30	: 0V	0V

Q104

e : 0.5V	e : 2.0V
b : 1.2V	b : 1.2V
c : 1.2V	c : 1.1V
Q121	Q171
e : 0.4V	e : 12V.
b : 1.1V	b : 11.2V
c : 2.0V	c : 6.0V
Q172	Q173
e : 0V	e : 0V
b : 0.5V	b : 0.5V
c : 0.5V	c : 10.3V

Q12

e : 2.0V
b : 1.2V
c : 1.1V

Q171

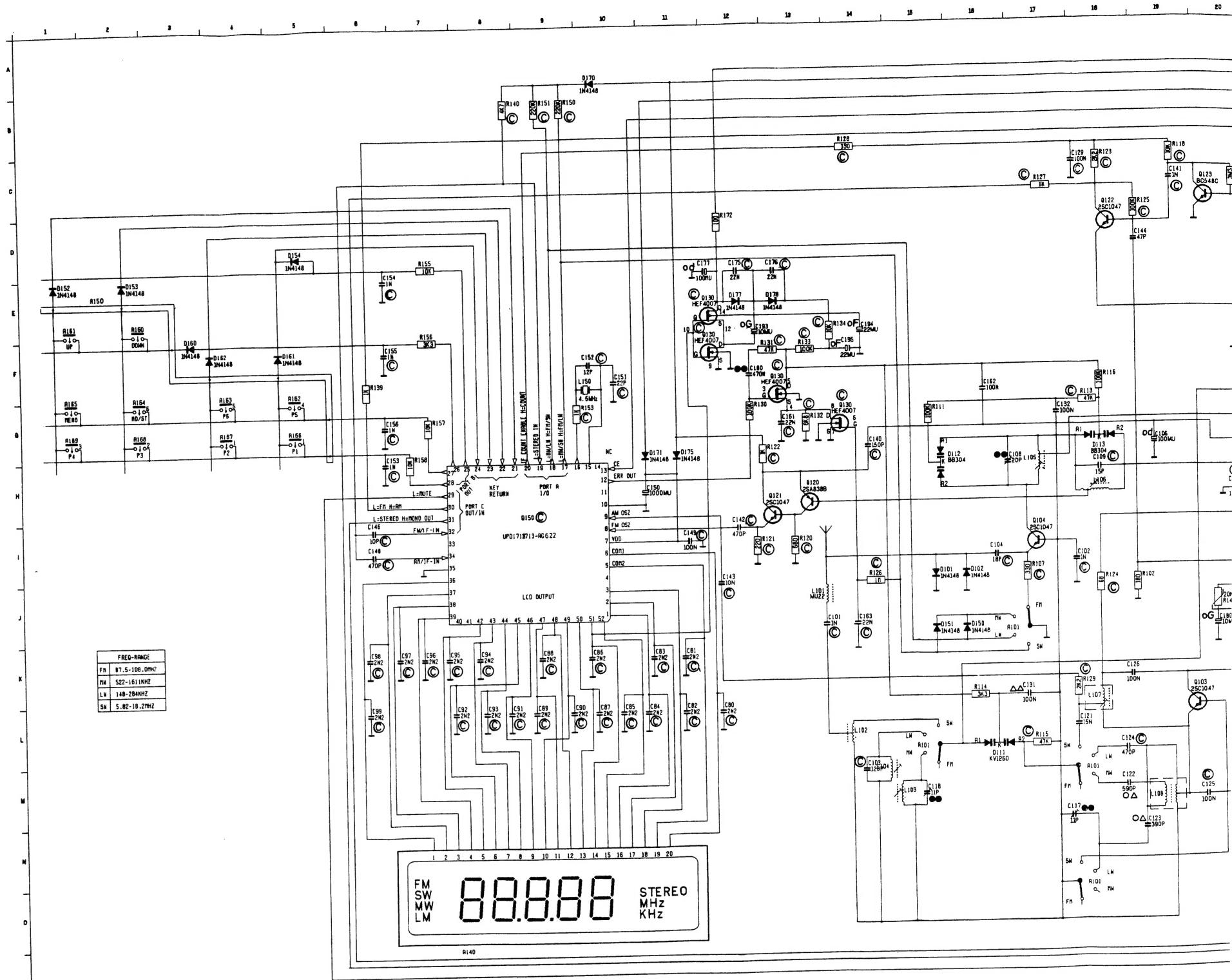
e : 12V.
b : 11.2V
c : 6.0V

Q172

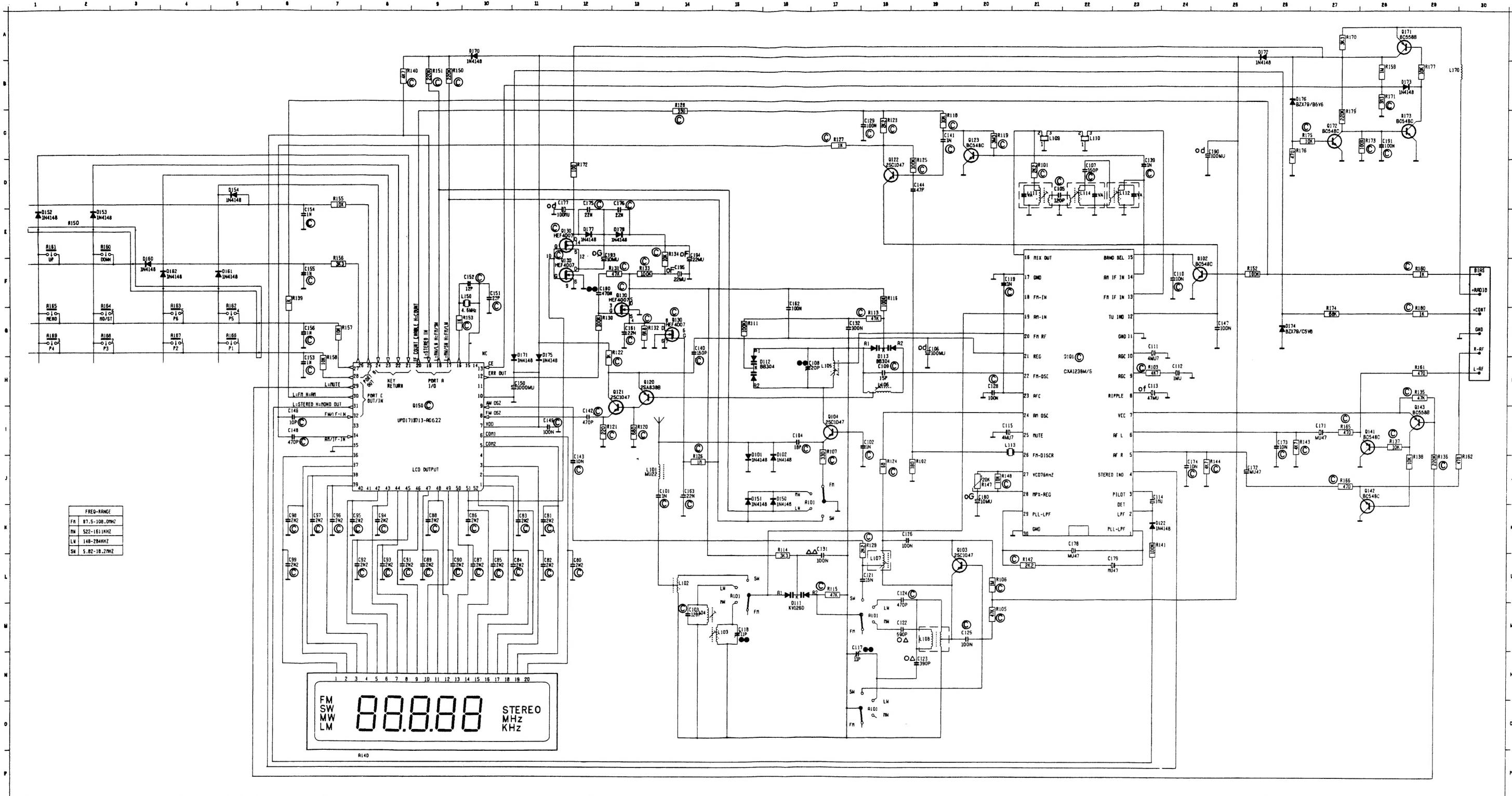
Q172 Q173

Q1

Q173



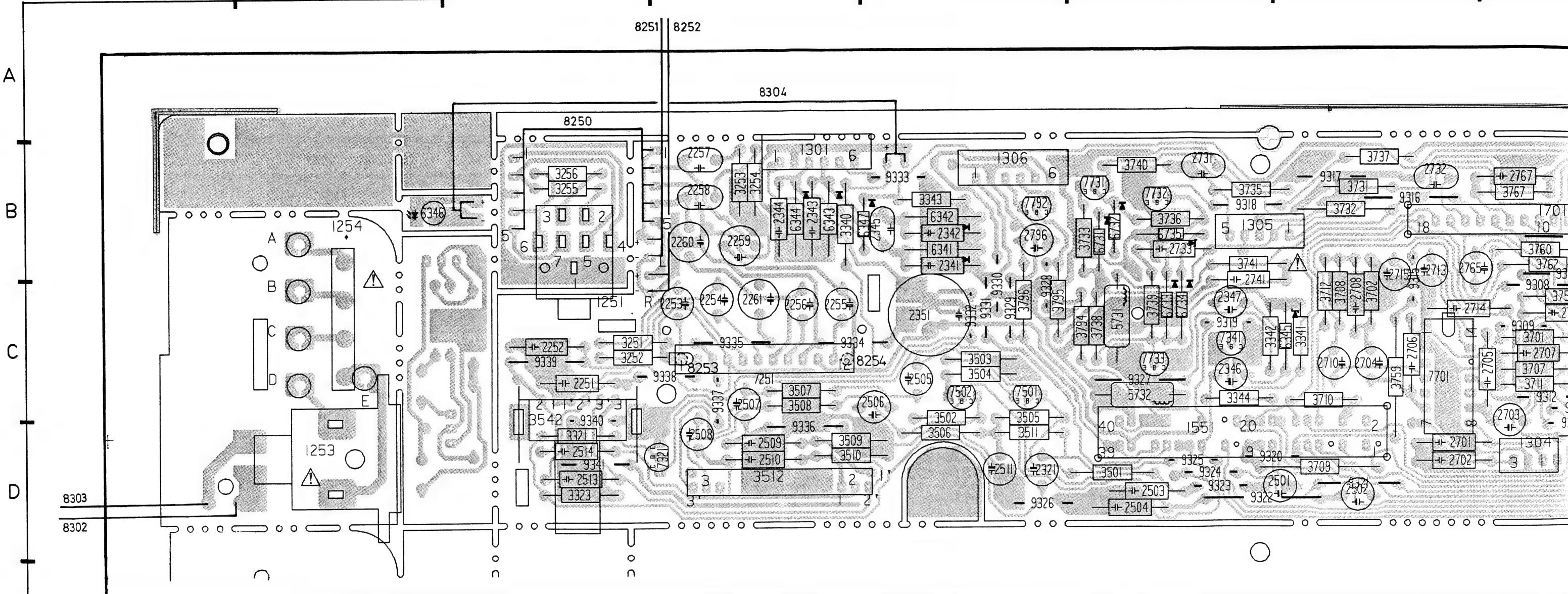
ITEM NUMBERING CONVERSION -												UNLESS SPECIFIED		
												ARE E		
J17	C114	J23	C156	G 6	C91	L B	Q178	E13	Q143	I29	R133	F13	R173	C28
L15	C115	I20	C160	F12	C92	L 7	L101	J14	Q150	H 8	R134	E14	R174	C27
M18	C117	M17	C161	G13	C93	B 8	L102	L14	Q171	A28	R135	H29	CXXX	BY 2XXX
O18	C118	M15	C162	F16	C94	K 8	L103	M15	Q172	C27	R136	J29	R176	C26
P 8	C119	F20	C163	J16	C95	K 7	L104	M15	Q173	C28	R137	I28	R177	B25
E 2	C121	L17	C171	J27	C96	K 7	L105	H17	R101	D21	R138	J29	R178	C27
E 2	C123	N19	C173	I26	C98	K 6	L106	H17	R102	J19	R139	F 5	R180	G29
E 1	C124	L18	C174	J24	C99	S 5	L108	N19	R105	N20	R140	B 8	REPLACED BY XXXX	
F 5	C125	M20	C175	D12	C100	I15	L109	C21	R106	L20	R142	L21	CXXX BY 2XXX	
F 4	C126	K18	C176	D10	C102	I16	L110	C22	R107	I17	R143	I26	DXXX BY 6XXX	
F 2	C128	M20	C177	D12	C103	I11	L111	L16	R111	O15	R144	J24	LXXX BY 5XXX	
F 1	C129	L17	C178	K22	C104	H15	L112	O23	R113	G18	R147	J20	OXXX BY 7XXX	
G 5	C130	K17	C179	L23	C105	G18	L113	I20	R114	K16	R148	J20	RXXX BY 3XXX	
G 4	C132	G17	C180	J20	C106	N23	L114	N22	R115	L17	R150	B 9		
G 2	C133	D23	C190	C24	C107	J16	L115	F 9	R116	F18	R151	B 9		
G 1	C140	G14	C181	C26	C108	J15	L170	B30	R118	C19	R152	F25		
J13	C141	C19	C182	C26	C109	E 1	R101	O21	R119	C20	R153	D 9		
J12	C142	C19	C184	E14	C110	E 2	R102	F24	R120	I13	R154	D 7		
J11	C143	J12	C195	F14	C111	D 5	R121	N20	R121	C 2	R155	F 7		
H14	C144	D18	C80	L12	C112	F 3	R122	I17	R122	C 2	R157	G 7		
I16	C146	I 6	C81	K11	C113	D 5	R123	H13	R123	C18	R158	H 7		
M21	C147	G25	C82	L11	C114	F 4	R124	H13	R124	J18	R159	B28		
G19	C148	I 6	C83	K11	C115	R10	R125	D18	R125	D19	R160	T29		
D22	C149	I 11	C84	L11	C116	G11	R126	C20	R126	J14	R161	A28		
H16	C150	M10	C85	L10	C117	R26	R127	E12	R127	C17	R162	J30		
H19	C151	F10	C86	M10	C118	B28	R128	I12	R128	C14	R163	I27		
F24	C152	F10	C87	L10	C119	D26	R129	F12	R129	X18	R164	J27		
G23	C153	H 6	C88	M 9	C120	C11	R130	G14	R130	C12	R170	R27		
H24	C154	E 6	C89	L 8	C121	B26	R131	I28	R171	B28				
H23	C155	F 6	C90	L 9	C122	E12	R142	J28	R172	D12				



A101 J17	C14 J23	C156 G 6	C01 L 8	0178 E13	0145 I29	R133 F13	R173 C28
A101 L15	C15 I20	C160 F12	C92 L 7	0101 J14	0150 H 8	R174 C27	R135 K29
A101 M18	C17 M17	C161 O13	C93 L 8	0102 L14	0171 R28	R136 C26	R175 C26
A101 D16	C18 M15	C162 F16	C94 K 8	0103 M15	0172 C27	R137 B29	R176 C26
A101 P 8	C19 F20	C163 J14	C95 K 7	0104 M15	0173 C28	R138 J28	R177 B29
R150 E 2	C10 L17	C170 J27	C96 K 7	0105 H17	0174 J29	R139 C27	R178 C27
A101 M16	C12 M16	C172 J25	C97 K 7	0106 H18	0102 J19	R140 B 8	R180 G 28
A101 E 2	C13 N19	C173 J26	C98 K 6	0107 L18	0103 H23	R141 B 8	R181 G 28
A151 E 1	C124 L18	C174 J24	C99 L 6	0108 L19	0105 N20	R142 K23	R182 G 28
A102 P 5	C125 H20	C175 D12	C100 L 6	0109 L21	0106 L20	R143 L21	R183 G 28
A102 M18	C126 H18	C176 D13	C101 L 6	0102 J18	0107 L22	R144 L21	R184 G 28
A103 F 4	C128 H20	C177 D12	C102 L 6	0103 J18	0108 L23	R145 L21	R185 G 28
A104 F 2	C129 K17	C178 K27	C103 L 6	0111 L16	0112 D21	R146 L21	R186 G 28
A105 F 1	C129 K17	C179 K27	C104 L 6	0112 L16	0113 D23	R147 L20	R187 G 28
A106 G 5	C131 K17	C179 L23	C105 L 6	0113 G18	0114 L20	R148 J20	R188 G 28
A107 G 4	C132 G17	C180 L23	C106 L 6	0114 G18	0115 L17	R149 B 9	R189 G 28
A108 G 2	C139 D23	C180 C24	C107 L 6	0150 J16	0150 F 9	R150 F 8	R190 G 28
A109 G 1	C140 G14	C191 C29	C108 L 6	0151 J15	0150 B 9	R151 F 8	R191 G 28
C101 J13	C141 C19	C193 E12	C109 L 6	0152 B 9	0151 C20	R152 F 25	R192 G 28
C102 J17	C142 J12	C194 E14	C110 L 6	0101 O21	0153 O 9	R153 O 9	R193 G 28
C103 M14	C144 D12	C195 F 4	C111 L 6	0102 O20	0154 O 7	R154 O 7	R194 G 28
C104 M16	C146 I 6	C80 L12	C160 F 3	0104 I17	0155 O 7	R155 O 7	R195 G 28
C105 D21	C147 G25	C82 L11	C161 F 5	0120 H13	0156 G12	R156 G 7	R196 G 28
C106 D19	C148 G25	C83 L11	C162 F 4	0121 I13	0157 G12	R157 G 7	R197 G 28
C107 D27	C149 J11	C84 L11	C163 F 4	0122 I13	0158 H 7	R158 H 7	R198 G 28
C108 M16	C150 H10	C85 L10	C164 F 4	0123 I10	0159 B28	R159 B28	R199 G 28
C109 H18	C151 F10	C86 L10	C165 F 4	0124 J11	0160 B28	R160 B28	R200 G 28
C110 H23	C152 H 6	C87 L10	C166 F 4	0125 J11	0161 B28	R161 B28	R201 G 28
C111 G23	C153 H 6	C88 L 9	C167 F 4	0126 J11	0162 B28	R162 B28	R202 G 28
C112 H24	C154 E 6	C89 L 9	C168 F 4	0127 J12	0163 B28	R163 B28	R203 G 28
C113 H23	C155 F 6	C90 L 9	C169 F 4	0128 J12	0164 B28	R164 B28	R204 G 28

1251	C3	1601	D8	2258	B4	2345	B5	2506	C5	2552	B9	2708	C7	2741	C6	2759	C9	3321	D3	3503	C5	3512	D4	3709	D7	3731	B7	3741	B6	3761	B8	3794	C6	6345	C7	7321	D4	77921		
1253	D2	1701	B8	2259	B4	2346	C6	2507	C4	2602	C10	2709	C8	2751	C9	2760	C9	3323	D3	3504	C5	3542	D3	3710	C7	3732	B7	3753	B9	3762	B8	3795	C5	6346	B2	7341	C6	82502		
1254	B2	2251	C3	2260	B4	2347	C6	2508	D4	2701	D7	2710	C7	2752	C9	2761	C9	2796	B5	3340	D4	3505	D5	3551	B9	3711	C8	3733	B6	3754	C8	3763	B9	3796	C5	6347	B5	7501	C5	82511
1301	B4	2252	C3	2261	C4	2351	C5	2509	D4	2702	D7	2713	B7	2753	C9	2762	C9	3251	C3	3341	C7	3506	D5	3552	B9	3712	C7	3735	B6	3755	C9	3764	B9	5731	C6	6731	B6	7502	C5	82521
1303	B9	2253	C4	2321	D5	2501	D7	2510	D4	2703	D8	2714	C7	2754	C9	2764	D9	3252	C3	3342	C7	3507	C4	3601	B9	3713	D8	3736	B6	3756	C8	3765	B9	5732	C6	6732	B6	7701	C7	82531
1304	D8	2254	C4	2341	B5	2502	D7	2511	D5	2704	C7	2715	C7	2755	C9	2765	B7	3253	B4	3343	B5	3508	C4	3701	C8	3721	B9	3737	B7	3757	B9	3766	B9	6341	B5	6733	C6	7731	B6	82541
1305	B6	2255	C4	2342	B5	2503	D6	2513	D3	2705	C8	2731	B6	2756	C9	2766	D9	3254	B4	3344	C6	3509	D4	3702	C7	3722	B9	3738	C6	3758	C8	3767	B8	6342	B5	6734	C6	7732	B6	83021
1306	B5	2256	C4	2343	B4	2504	D6	2514	D3	2706	C7	2732	B7	2757	C9	2767	B8	3255	B3	3501	D6	3510	D4	3707	C8	3723	B10	3739	C6	3759	C7	3768	B8	6343	B4	6735	B6	7733	C6	83031
1551	D6	2257	B4	2344	B4	2505	C5	2551	B9	2707	C8	2733	B6	2758	C8	2768	B8	3256	B3	3502	D5	3511	D5	3708	C7	3724	B10	3740	B6	3760	B8	3770	C8	6344	B4	7251	C4	7751	C9	83041

A horizontal number line starting at 1 and ending at 7. There are tick marks at every integer value from 1 to 7, with vertical lines extending downwards from each tick mark.



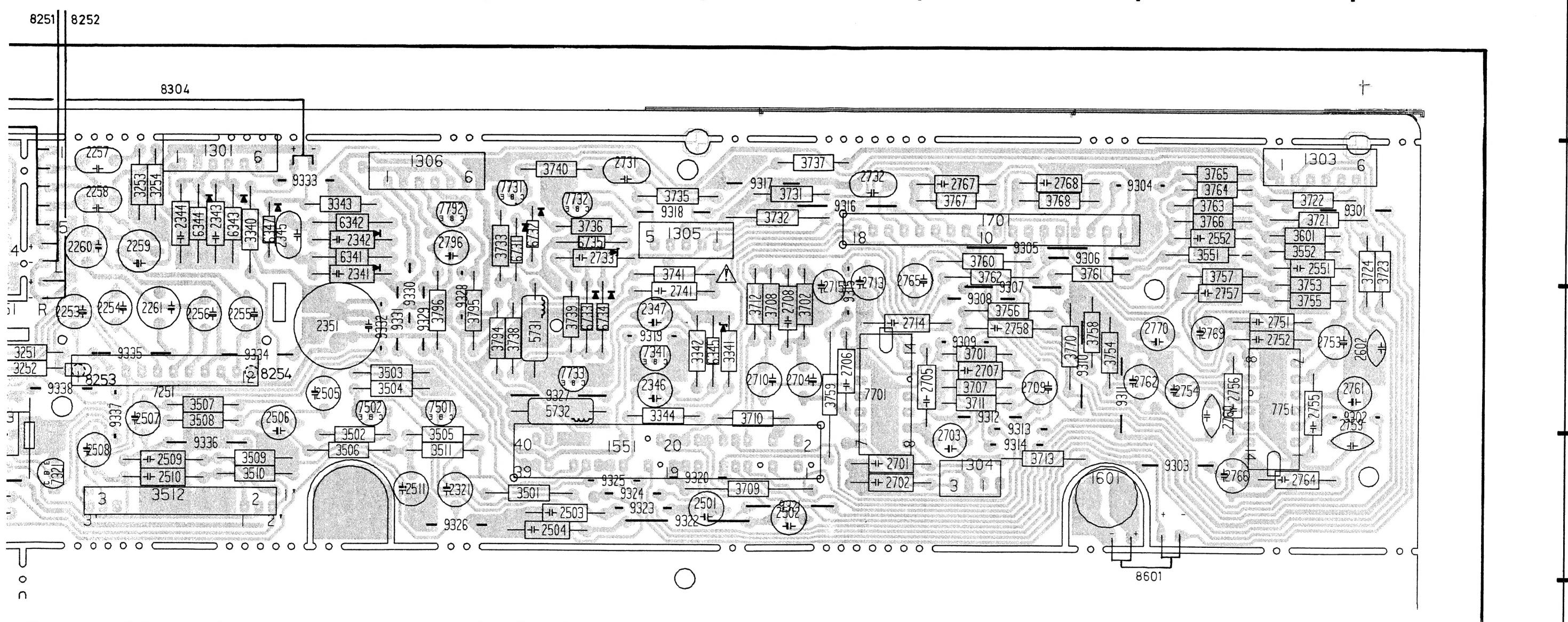
NOTE

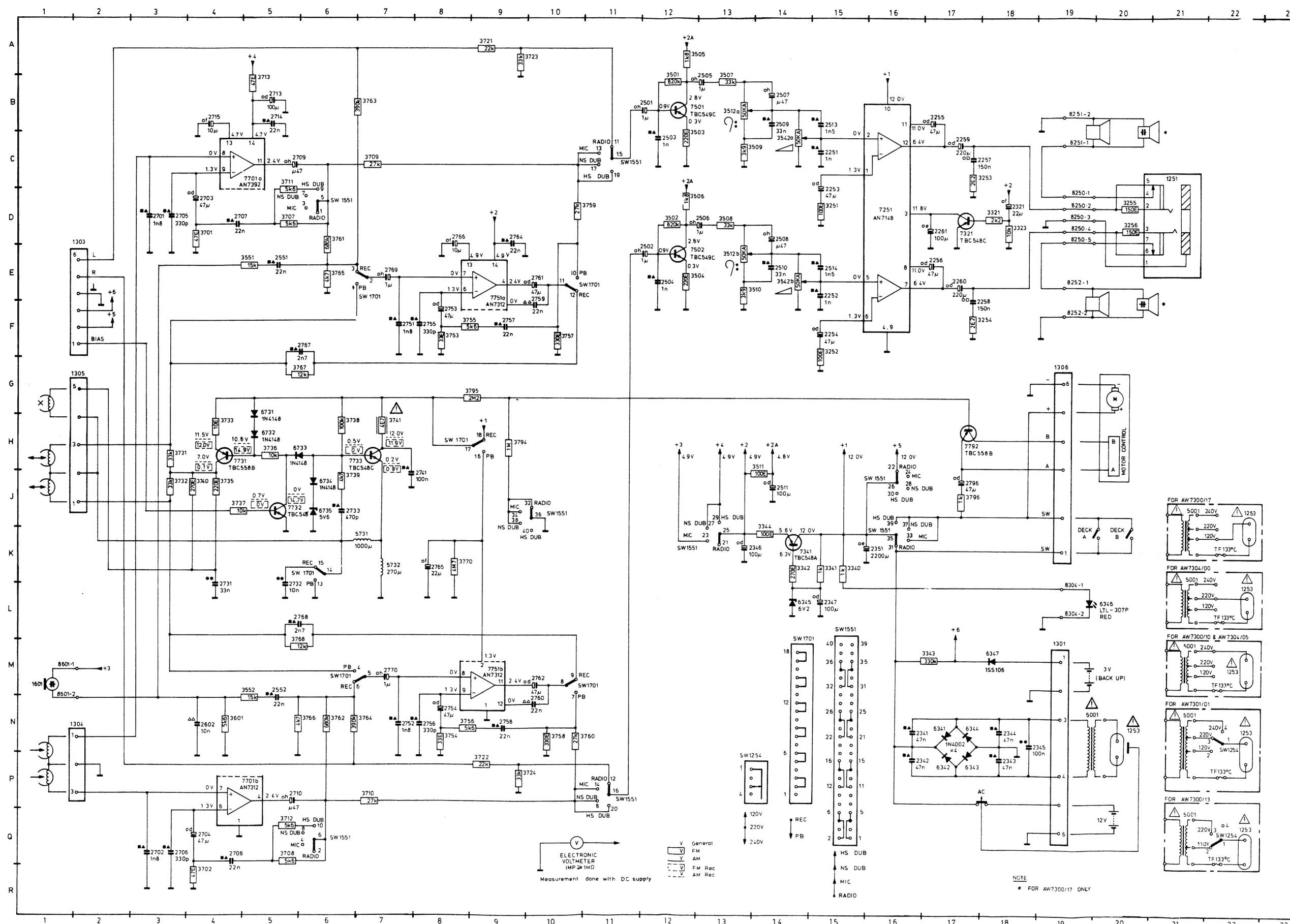
* FOR AW 7301/01 & AW 7300/13 ONLY

1	2	3	4	5	6	7
+1 : 12V	7701	7751	7251	AM Rec	FM Rec	AM Rec
+2 : 4.9V	1 : 0V	8 : 0V	1 : 0V	e : 0.3V	e : 0.3V	e : 0.3V
+2A : 4.8V	2 : -	9 : 1.3V	2 : 1.3V	b : 0.9V	b : 0.9V	b : 0.9V
+3 : 4.9V	3 : -	10 : -	3 : 0V	c : 2.8V	c : 2.8V	c : 2.8V
+4 : 4.9V	4 : 2.4V	11 : 2.4V	4 : 2.4V	10 : 12V		
+5 : 12V	5 : -	12 : -	5 : -	11 : 11V	e : 0.3V	e : 0.3V
+6 : 3V	6 : 1.3V	13 : 4.7V	6 : 1.3V	7731	b : 0.9V	b : 0.9V
	7 : 0V	14 : 4.7V	7 : 0V	7732	c : 2.8V	c : 2.8V
			14 : 4.9V			

2741	C6	2759	C9	2769	C9	3321	D3	3503	C5	3512	D4	3709	D7	3731	B7	3741	B6	3761	B8	3794	C6	6345	C7	7321	D4	7792	B5	8601	D9	9309	C8	9318	B6	9327	C6	9336	D4
2751	C9	2760	C9	2770	C9	3323	D3	3504	C5	3542	D3	3710	C7	3732	B7	3753	B9	3762	B8	3795	C5	6346	B2	7341	C6	8250	A3	9301	B9	9310	C8	9319	C6	9328	C5	9337	C4
2752	C9	2761	C9	2796	B5	3340	B4	3505	D5	3551	B9	3711	C8	3733	B6	3754	C8	3763	B9	3796	C5	6347	B5	7501	C5	8251	A3	9302	C9	9311	C8	9320	D6	9329	C5	9338	C4
2753	C9	2762	C9	3251	C3	3341	C7	3506	D5	3552	B9	3712	C7	3735	B6	3755	C9	3764	B9	5731	C6	6731	B6	7502	C5	8252	A4	9303	D9	9312	C8	9321	D7	9330	C5	9339	C3
2754	C9	2764	D9	3252	C3	3342	C7	3507	C4	3601	B9	3713	D8	3736	B6	3756	C8	3765	B9	5732	C6	6732	B6	7701	C7	8253	C4	9304	B9	9313	D8	9322	D6	9331	C5	9340	D3
2755	C9	2765	B7	3253	B4	3343	B5	3508	C4	3701	C8	3721	B9	3737	B7	3757	B9	3766	B9	6341	B5	6733	C6	7731	B6	8254	C5	9305	B8	9314	D8	9323	C6	9332	C5	9341	D3
2756	C9	2766	D9	3254	B4	3344	C6	3509	D4	3702	C7	3722	B9	3738	C6	3758	C8	3767	B8	6342	B5	6734	C6	7732	B6	8302	D1	9306	B8	9315	C7	9324	D6	9333	B5		
2757	C9	2767	B8	3255	B3	3501	D6	3510	D4	3707	C8	3723	B10	3739	C6	3759	C7	3768	B8	6343	B4	6735	B6	7733	C6	8303	D1	9307	B8	9316	B7	9325	D6	9334	C4		
2758	C8	2768	B8	3256	B3	3502	D5	3511	D5	3708	C7	3724	B10	3740	B6	3760	B8	3770	C8	6344	B4	7251	C4	7751	C9	8304	A4	9308	C8	9317	B7	9326	D5	9335	C4		

4 5 6 7 8 9 10





$|IM_{P}| \geq 1M\Omega$

Measurement done with DC source

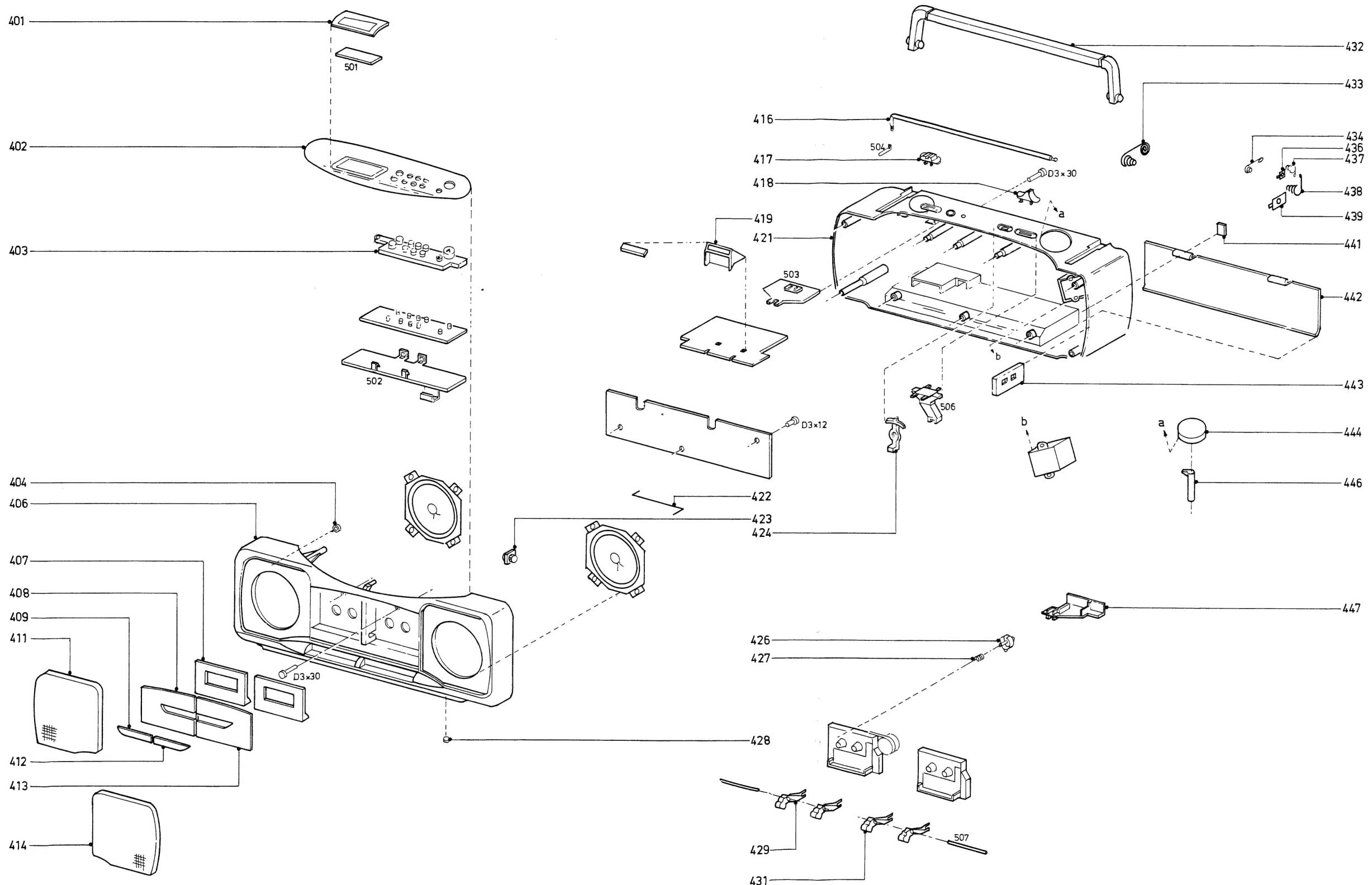
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10 11

NOTE

* FOR AW7300/17 ONLY

18 19



401	4822 450 61556
402	4822 423 90151
403	4822 410 60664
404	4822 532 51711
406	4822 423 51024
407	4822 443 62936
408	4822 454 12584
409	4822 450 61557
411	4822 458 30574
412	4822 450 61558
413	4822 454 12585
414	4822 458 30575
416	4822 303 30298
417	4822 411 61691
418	4822 411 61688
419	4822 404 10823
421	4822 421 60128
422	4822 492 70427
423	4822 529 10251
424	4822 411 61689
426	4822 403 30762
427	4822 492 70595
428	4822 462 40379
429	4822 410 60662
431	4822 410 60663
432	4822 498 10376
433	4822 492 51733
434	4822 290 80866
436	4822 290 80606
437	4822 492 52169
438	4822 492 51734
439	4822 290 80313
441	NOT APPLICABLE
442	4822 423 41053
443	4822 403 52826
444	4822 413 51337
446	4822 404 10824
447	4822 404 10822
IFU	4822 736 20629

MISCELLANEOUS			
1101	BANDSWITCH	4822	277 21282
1140	LCD DISPLAY	4822	130 90841
1160	SWITCH-KEY	4822	276 12276
1161	SWITCH-KEY	4822	276 12276
1162	SWITCH-KEY	4822	276 12276
1163	SWITCH-KEY	4822	276 12276
1164	SWITCH-KEY	4822	276 12276
1165	SWITCH-KEY	4822	276 12276
1166	SWITCH-KEY	4822	276 12276
1167	SWITCH-KEY	4822	276 12276
1168	SWITCH-KEY	4822	276 12276
1169	SWITCH-KEY	4822	276 12276
1251	SOCKET-HDPHONE	4822	267 31014
1253	△ SOCKET-MAINS	4822	265 20287
1255	SPEAKER 80 2W	4822	240 40183
1256	SPEAKER 80 2W	4822	240 40183
1551	MODE SWITCH	4822	277 21198
1601	ELECTRET MIC	4822	242 30121
1701	RECORD SWITCH	4822	277 20594
5109	CERAM FILTER	4822	242 71856
5150	CRYSTAL 4.5MHz	4822	242 72292
CAPACITORS			
2080	CHIP 50V 2.2nF	4822	122 33704
2081	CHIP 50V 2.2nF	4822	122 33704
2082	CHIP 50V 2.2nF	4822	122 33704
2083	CHIP 50V 2.2nF	4822	122 33704
2084	CHIP 50V 2.2nF	4822	122 33704
2085	CHIP 50V 2.2nF	4822	122 33704
2086	CHIP 50V 2.2nF	4822	122 33704
2087	CHIP 50V 2.2nF	4822	122 33704
2088	CHIP 50V 2.2nF	4822	122 33704
2089	CHIP 50V 2.2nF	4822	122 33704
2090	CHIP 50V 2.2nF	4822	122 33704
2091	CHIP 50V 2.2nF	4822	122 33704
2092	CHIP 50V 2.2nF	4822	122 33704
2093	CHIP 50V 2.2nF	4822	122 33704
2094	CHIP 50V 2.2nF	4822	122 33704
2095	CHIP 50V 2.2nF	4822	122 33704
2096	CHIP 50V 2.2nF	4822	122 33704
2097	CHIP 50V 2.2nF	4822	122 33704
2098	CHIP 50V 2.2nF	4822	122 33704
2099	CHIP 50V 2.2nF	4822	122 33704
2101	CHIP 50V 1nF	4822	122 33703
2102	CHIP 50V 1nF	4822	122 33703
2103	CHIP 50V 120pF	4822	122 31766
2105	CHIP 50V 120pF	4822	122 31766
2107	CHIP 50V 150pF	4822	122 33701
2108	TRIM 100V 20pF	4822	125 50355
2109	CHIP 50V 15pF	4822	122 32504
2110	CHIP 50V 10nF	4822	122 33705
2117	TRIM 100V 20pF	4822	125 50355
2118	TRIM 100V 11pF	4822	125 60101
2119	CHIP 50V 1nF	4822	122 33703
2122	PP 160V 590pF	4822	121 43706
2123	PP 160V 390pF	4822	121 43705
2124	CHIP 63V 470pF	4822	122 32882

RESISTORS			
3147	PRESET 20K	4822	100 20589
3512	POTM 50KA X 2	4822	105 11052
3542	POTM 50KA X 2	4822	101 21105
3741	△ NFR25 4.7E PM5T	4822	052 10478
COILS			
5001	△ TRANSFO, MAINS	4822	146 30886
5101	COIL 0.22uH	4822	157 53192
5102	SW ANT COIL	4822	157 53883
5103	MW-LW ANT ASSY	4822	158 60593
5105	COIL-FM RF	4822	156 30947
5106	COIL-FM RF	4822	156 30947
5107	SW OSC COIL BLK	4822	157 53884
5108	MW OSC COIL BR	4822	157 53022
5111	AM IFT COIL	4822	156 10688
5112	AM IFT COIL YW	4822	156 10726
5114	AM IFT COIL YW	4822	156 10726
5170	COIL 2.2uH	4822	157 60146
5731	IND. 1000uH	4822	157 53792
5732	IND. 270uH	4822	157 52991
SEMICONDUCTORS			
6101	1N4148	4822	130 30621
6102	1N4148	4822	130 30621
6111	KV1260T	4822	130 81788
6112	BB304	4822	130 81091
6113	BB304	4822	130 81091
6122	1N4148	4822	130 30621
6150	1N4148	4822	130 30621

6151	1N4148	4822	130 30621
6152	1N4148	4822	130 30621
6153	1N4148	4822	130 30621
6154	1N4148	4822	130 30621
6160	1N4148	4822	130 30621
6161	1N4148	4822	130 30621
6162	1N4148	4822	130 30621
6170	1N4148	4822	130 30621
6171	1N4148	4822	130 30621
6172	1N4148	4822	130 30621
6173	1N4148	4822	130 30621
6174	BZX79C5V6	4822	130 34173
6175	1N4148	4822	130 30621
6176	BZX79B5V6	4822	130 34173
6177	1N4148	4822	130 30621
6178	1N4148	4822	130 30621
6341	1N4002	5322	130 30684
6342	1N4002	5322	130 30684
6343	1N4002	5322	130 30684
6344	1N4002	5322	130 30684
6345	BZX79C6V2	4822	130 34167
6346	LTL-307P	4822	130 82029
6347	1SS106	4822	130 32574
6731	1N4148	4822	130 30621
6732	1N4148	4822	130 30621
6733	1N4148	4822	130 30621
6734	1N4148	4822	130 30621
6735	BZX79C5V6	4822	130 34173
7101	CXA1238MS	4822	209 73851
7102	TBC548C	4822	130 44196
7103	2SC1047C	4822	130 60163
7104	2SC1047C	4822	130 60163
7120	2SA838B	4822	130 60093
7121	2SC1047C	4822	130 60163
7122	2SC1047C	4822	130 60163
7123	TBC548C	4822	130 44196
7130	CD4007CM	4822	209 61116
7141	TBC548C	4822	130 44196
7142	TBC548C	4822	130 44196
7143	TBC558B	4822	130 44196
7150	UPD1713AG-622	4822	209 62454
7171	TBC558B	4822	130 44197
7172	TBC548C	4822	130 44196
7173	TBC548C	4822	130 44196
7251	AN7148	4822	209 70998
7321	TBC548B	4822	130 40937
7341	TBC548A	4822	130 40948
7501	TBC549C	4822	130 44246
7502	TBC549C	4822	130 44246
7701	AN7312	4822	209 70997
7731	TBC558B	4822	130 44197
7732	TBC548	4822	130 40938
7733	TBC548C	4822	130 44196
7751	AN7312	4822	209 70997
7792	TBC558B	4822	130 44197